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—Chester M. Pierce, *AAAS Science Books & Films*

"This book is excellent. . . . The papers are consistently good . . . the reader senses the excitement and challenge inherent in each question. For this reason the book will be especially valuable to biological and psychological investigators in the field of communication. It will also prove both informative and stimulating to the well-read layperson or the college student interested in bio-social research."

**Advances in the Study of
Communication and Affect**

**Volume 2
Nonverbal Communication
Of Aggression**

Edited by Patricia Pliner, Lester Krames,
and Thomas Alloway
Erindale College, University of Toronto

This volume examines the nonverbal communication of aggression by humans and a variety of other mammals. Such behaviors as

- staring,
- eye contact,
- body postures and movements,
- vocalizations,
- facial expressions,
- and fighting

are discussed in the context of their roles in both the communication and regulation of aggression.

The Proceedings of the Fourth Annual Symposium on Communication and Affect held at Erindale College, University of Toronto, March 28-30, 1974.

Of Interest To: linguists, psychologists, and researchers in animal behavior.

Contents: Harvey Sarles, Language and communication—II: the view from '74. Ralph V. Exline, Steve L. Ellyson, and Barbara Long, Visual behavior as an aspect of power role relationships. Phoebe C. Ellsworth, Direct gaze as a social stimulus: the example of aggression. Carroll E. Izard, Patterns of emotions and emotion communication in "hostility" and aggression. E. W. Menzel, Jr., Communication and aggression in a group of young chimpanzees. Robert E. Miller, Nonverbal expressions of aggression and submission in social groups of primates. Benson E. Ginsburg, Nonverbal communication: the effect of affect on individual and group behavior. Stanley C. Ratner, Animal's defenses: fighting in predator-prey relations.

Approx. 190 pages
27 illustrations, 17 tables
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**Volume 1
Nonverbal Communication**

Edited by Lester Krames, Patricia Pliner,
and Thomas Alloway
Erindale College, University of Toronto

This work presents an experimental, theoretical, and comparative approach to the topic of nonverbal communication. A collection of the most recent research in the field, it features a radically new contribution by Adrian Wenner challenging the widely-accepted Van Frisch theory of bee language. Other crucial topics covered are:

- social and pharmacological influences on nonverbal communication of monkeys and man
- pheromonal sex attractants in the Norway rat
- communication of affect in the mother-young relationship of rodents
- animal communication and semantics.

Of Interest To: comparative and physiological psychologists, ethologists, zoologists, neurobiologists, and researchers in animal behavior and social biology.

Contents: James H. Reynierse, Communication elements constraining animal learning and performance. Peter Marler, Animal communication. William N. Tavolga, Application of the concept of levels of organization to the study of animal communication. Robert E. Miller, Social and pharmacological influences on the nonverbal communication of monkeys and of man. W. J. Carr, Pheromonal sex attractants in the Norway rat. Adrian M. Wenner, Information transfer in honey bees: a population approach. Howard A. Moss, Communication in mother-infant interaction. Victor H. Denenberg, The communication of affect among rodents through mother-young interactions. Index.

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Edited by Laurence W. Hedlund

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Volume 54 in

Advances in Experimental Medicine and Biology

Many—possibly most—life processes change in a rhythmic fashion, with similar states recurring at regular time intervals. The critical study of this rhythmic pattern or "time-form" is a relatively recent development, and only now are biologists beginning to appreciate the magnitude of complexity of living systems when considered in terms of this dimension.

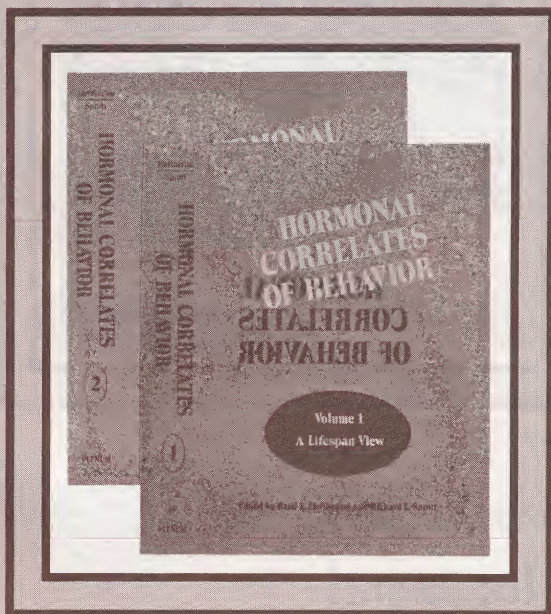
This volume provides a much-needed overview of current research on mammalian biorhythms, especially those related to endocrine function of the pineal, adrenal, and pituitary glands and the gonads. Included are authoritative reviews on such topics as circadian-pituitary-adrenal rhythms, neural and hormonal bases of the reproductive cycle, and the effects of various hormones on the pituitary-adrenal axis.

Of Interest To: endocrinologists, biologists, physiologists, and neurologists.

Contents: Franz Halberg, Biological rhythms. **PINEAL RHYTHMS:** Russel J. Reiter, Endocrine rhythms associated with pineal gland function; E. P. Wallen and J. M. Yochim, An analysis of the pineal hydroxyindole-O-methyltransferase rhythm during the estrous cycle of the rat; J. M. Yochim and E. P. Wallen, Correlation between hydroxyindole-O-methyltransferase rhythmicity and reproduction function in the rat; Harry J. Lynch, Maria Hsuan, and Richard J. Wurzman, Sympathetic neural control of indoleamine metabolism in the rat pineal gland. **GONADAL RHYTHMS:** Roger A. Gorski, S. P. Mennin, and K. Kubo, The neural and hormonal bases of the reproductive cycle. **ADRENAL CORTICAL RHYTHMS:** Julian I. Kitay, Effects of various hormones on the pituitary-adrenal axis; Dorothy T. Krieger, Circadian pituitary adrenal rhythms.

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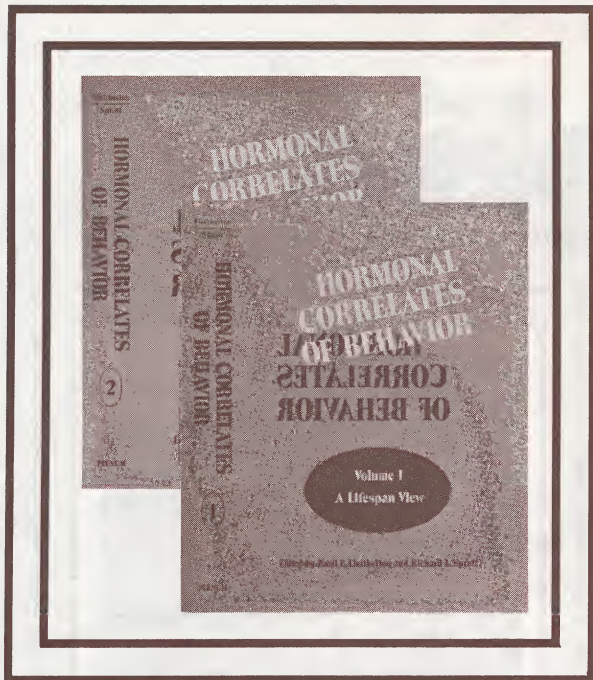
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IN TWO VOLUMES

Hormonal Correlates of Behavior

Edited by Basil E. Eleftheriou
and Richard L. Sprott

The Jackson Laboratory, Bar Harbor, Maine

This comprehensive two-volume treatise critically assesses the abundant literature dealing with the effects and roles of various hormones in the biological and behavioral response of the organism to its environment. Interpreting data from several interrelated research fields, leading scientists analyze the functions of endocrine systems in circadian rhythms, the process of puberty, and the developing personality, and offer new theories concerning these functions in relation to mental illness, maternal behavior, early experience, aging, and the possible role of the organism's genotype. Suitable as a textbook for the graduate and advanced undergraduate student and as a reference source for scientists in the field, this work is an up-to-date, integrated synopsis and evaluation of behavioral endocrinology.

Of Interest To: endocrinologists, psychologists and psychiatrists, physiologists, geneticists, and students in these fields.

Volume 1 A Lifespan View

This volume selectively analyzes hormonal correlates of behavior from early life through adolescence, adulthood, and senescence. Outstanding contributors discuss such topics as emotional behavior and adrenocortical function; neural and endocrine control of aggressive behavior; and hormones, gender identity, and behavior.

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Volume 2 An Organismic View

Examining characteristics of living systems at any age, Volume 2 explores the roles of hormones in the interaction between the organism and its environment. This volume reviews such subjects as chronoendocrinology of vertebrates, hormonal control of feeding behavior and energy balance, hormones and avoidance learning, and motivational effects of the pituitary and adrenal hormones.

Contents: Richard L. Sprott and Basil E. Eleftheriou, Introduction. Basil E. Eleftheriou, Hormones and behavior. Albert H. Meier, Chronoendocrinology of vertebrates. John G. Vandenberg, Hormones, pheromones and behavior. Burton M. Slotnick, Neural and hormonal basis of maternal behavior in the rat. Jack Panksepp, Hormonal control of feeding behavior and energy balance. Roger A. Hoffman, Pineal gland and behavior. Karen L. Stavnes, Biogenic amines and behavior: activity and avoidance learning. Richard L. Sprott, Hormones and avoidance learning. F. R. Brush and J. C. Froehlich, Motivational effects of the pituitary and adrenal hormones. Subject index.

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